

SW

(Task 1495)

**Bond Release Findings**

**Mine Name:** Small Fry  
**Operator:** Molycorp  
P. O. Box 469  
Questa, New Mexico 87556

**I.D. No.:** M0370022  
**Mineral Ownership:** Fee  
**Surface Ownership:** Fee and BLM  
**Permit Term:** Originally permitted in 1980

**Disturbed Area:** 6 acres  
**Regraded:** 6 acres  
**Reseeded:** 6 acres  
**Acres Bonded:** 6 acres

**Acres Proposed for Final Release:** 6 acres  
**Acres Recommended for Release:** 6 acres  
**Acres Remaining:** None

**Surety**

**Amount:** \$3800.00  
**Form:** Corporate Surety (Travelers)  
**Amount Proposed for Release:** \$3800.00  
**Amount Recommended for Release:** \$3800.00  
**Amount that would Remaining:** None

The Division has released all of the surety except that being held for revegetation; therefore, this memorandum only considers aspects of reclamation relating to revegetation, including vegetation cover, achievement of the postmining land use, and erosion control.

**Setting and Premining Environment**

The mine is to the west of the area where the Big Indian and Lisbon Valleys converge. There are two distinct areas that were disturbed and reclaimed. The mine pad and portals are at the base of some cliffs and very steep slopes, and there were power lines, roads, and a vent hole on the plateau above the mine. Vegetation in the mine area is mostly pinyon and juniper with some shrubs and a few grasses. Most of the area on the plateau is grass with some sagebrush and other shrubs, pinyon, and juniper. Soils on the plateau are sandy, but those near the portal were derived from both sandstone and shale.

The land use prior to any mining was wildlife habitat and grazing. The general area has a history of mining dating back to the 1950s, and there are several other uranium mines in the area.

**Reclamation**

Reclamation was completed in 2002-2003 with the site being seeded in the spring of 2003. The contractor used a small dozer with rippers to scarify the surface. The area was then broadcast seeded followed by application of certified noxious weed free straw.

**Hydrology**

There are no drainages that flow through the area, and there were no impoundments. Runoff from the area flows into the Big Indian Valley where there are no perennial streams. Roads have all been reclaimed.

Parts of the area are well vegetated, and other areas, particularly those with shale-derived soils, have little vegetation. Those areas with little vegetation have had some erosion. There is almost certainly more erosion in the reclaimed areas than in the undisturbed areas which is something of a concern. I do not believe remedial action is necessary because the erosion is not so severe that it is creating large gullies or interfering with grazing or wildlife habitat postmining land uses and because there are no perennial streams nearby. Although some sediment travels outside the disturbed area, most of the sediment has been settling out within the disturbed area.

### **Revegetation**

The postmining land use is wildlife habitat and grazing. The plant species that have established in the reclaimed areas are compatible with these uses (see additional discussed below), and since vegetation cover meets the success standard, the site is considered to meet the postmining land use.

No topsoil was salvaged when this site was originally disturbed. Except in the immediate vicinity of the vent shaft, soils on the plateau are sandy. The operator was able to rip and seed the roads and powerline corridors in this area and has had good revegetation success.

Soils in the area of the portals are more marginal as is vegetation success. When the site was reclaimed, much of the area had not been disturbed in several years, so volunteer vegetation, primarily rabbitbrush, has done very well in some places. Other areas have little or no cover.

I measured cover of perennial vegetation on June 14-15, 2006, and obtained a weighted value of 14.3 percent. I took measurements in several areas and weighted these measurements according to area to obtain the total.

I also measured cover in an undisturbed area adjacent to the portal pad and obtained a value of 17.2 percent. The plan says vegetation cover in undisturbed areas is 7.5 percent, so the revegetation success standard is 12.0 or 5.25 percent depending on which value is used.

There are some weeds, especially cheatgrass, but they do not dominate any area. The most common species in the reclaimed area are rabbitbrush, fourwing saltbush, Indian ricegrass, crested and other wheatgrasses, blue flax, and Palmer penstemon. The undisturbed area where I measured cover is dominated by pinyon and juniper with additional cover from sagebrush, Indian ricegrass, and serviceberry.

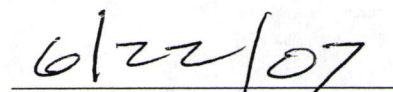
While the overall cover meets success criteria, only a portion of the access road was on land managed by the BLM. This section had marginal cover, and the BLM was originally not willing to allow release. They decided, though, that they would concur with releasing the surety if the operator would reseed the road. The road was drill seeded in the spring of 2007, and the BLM gave their concurrence for release. I do not know whether this effort has increased the amount of cover on the road.

### **Recommendation**

I recommend that the entire surety being held for reclamation of this site be released, and the BLM has concurred in this recommendation for the portion of the mine on land they manage.



Permit Lead



Date